



## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Parts 52 and 81

[EPA-R08-OAR-2021-0003; FRL-10454-01-R8]

#### Approval and Promulgation of Implementation Plans; Montana; Libby 1997 Annual

#### PM<sub>2.5</sub> Limited Maintenance Plan and Redesignation Request

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA or the Agency) is proposing to take three separate but related actions. First, EPA is proposing to determine that the Libby fine particulate matter (PM<sub>2.5</sub>) nonattainment area (Libby Area) is attaining the 1997 annual PM<sub>2.5</sub> national ambient air quality standards (NAAQS or standard) based on 2014–2021 data. The Agency is also proposing to approve Montana’s plan for maintaining the 1997 annual PM<sub>2.5</sub> NAAQS (limited maintenance plan) and to redesignate the Libby Area to attainment for the 1997 annual PM<sub>2.5</sub> NAAQS, submitted by the State of Montana on June 24, 2020.

**DATES:** Written comments must be received on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R08-OAR-2021-0003, to the Federal Rulemaking Portal at <https://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from [www.regulations.gov](https://www.regulations.gov). EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary

submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

*Docket:* All documents in the docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available electronically in [www.regulations.gov](http://www.regulations.gov). To reduce the risk of COVID-19 transmission, for this action we do not plan to offer hard copy review of the docket. Please email or call the person listed in the **FOR FURTHER INFORMATION CONTACT** section if you need to make alternative arrangements for access to the docket.

**FOR FURTHER INFORMATION CONTACT:** Amrita Singh, Air and Radiation Division, U.S. Environmental Protection Agency (EPA), Region 8, Mail Code ARD-QP, 1595 Wynkoop Street, Denver, Colorado 80202-1129, telephone number: (303) 312-6103, email address: [singh.amrita@epa.gov](mailto:singh.amrita@epa.gov).

**SUPPLEMENTARY INFORMATION:** Throughout this document wherever “we,” “us,” or “our” is used, we mean EPA.

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## **I. What are the actions EPA is proposing to take?**

EPA is proposing to take the following separate but related actions: (1) to determine that the Libby Area is attaining the 1997 annual PM<sub>2.5</sub> NAAQS based on 2014–2021 data; (2) to approve Montana's plan for maintaining the 1997 annual PM<sub>2.5</sub> NAAQS (limited maintenance plan); and (3) to redesignate the Libby Area to attainment for the 1997 annual PM<sub>2.5</sub> NAAQS.

Libby, Montana is a small rural community located in Lincoln County in the northwestern part of the State. Libby sits in the narrow, triangular Kootenai valley at an elevation of 2,100 feet. The Libby Area is dominated by three major mountain ranges that limit the airshed: (1) the Rocky Mountain and Flathead Ranges on the eastern boundary; (2) the Purcell Range, which roughly bisects the area from north to south; and (3) the Selkirk and Cabinet Ranges on the western boundary. Most of the area surrounding Libby, Montana is national forest land managed by the U.S. Forest Service.

These proposed actions are summarized and described in greater detail throughout this proposed rulemaking. EPA's 1997 annual PM<sub>2.5</sub> nonattainment designation for the Libby Area triggered an obligation for Montana to develop a nonattainment state implementation plan (SIP) revision addressing certain Clean Air Act (CAA) requirements under title I, part D, subpart 1 (hereinafter "Subpart 1") and title I, part D, subpart 4 (hereinafter "Subpart 4"). Subpart 1 contains the general requirements for nonattainment areas for criteria pollutants, including requirements to develop a SIP that provides for the implementation of reasonably available control measures (RACM) under section 172(c)(1), reasonable further progress (RFP), includes base-year and attainment-year emissions inventories, and for the implementation of contingency measures. As discussed in greater detail later in this document, Subpart 4 contains specific planning and scheduling requirements for coarse particulate matter (PM<sub>10</sub>) nonattainment areas,

including requirements for new source review (NSR), RACM (under CAA section 189(a)(1)(C)), and RFP. EPA's longstanding general guidance interpreting the 1990 CAA Amendments, known as the General Preamble, EPA discussed the relationship of Subpart 1 and Subpart 4 SIP requirements and pointed out that Subpart 1 requirements were to an extent "subsumed by, or integrally related to, the more specific PM-10 requirements." See 57 FR 13538 (April 16, 1992). In addition, under the United States Court of Appeals for the District of Columbia Circuit's (D.C. Circuit's) January 4, 2013, decision in *Natural Resources Defense Council (NRDC) v. EPA*, 706 F.3d 428 (D.C. Cir. 2013), Subpart 4 requirements apply to PM<sub>2.5</sub> nonattainment areas.<sup>1</sup>

On June 2, 2014 (79 FR 31566), EPA published a rule entitled "Identification of Nonattainment Classification and Deadlines for Submission of State Implementation Plan (SIP) Provisions for the 1997 Fine Particle (PM<sub>2.5</sub>) National Ambient Air Quality Standard (NAAQS) and 2006 PM<sub>2.5</sub> NAAQS" ("Classification and Deadlines Rule"). In that rule, the Agency responded to the D.C. Circuit's January 2013 decision by identifying all PM<sub>2.5</sub> nonattainment areas for the 1997 and 2006 PM<sub>2.5</sub> NAAQS as "Moderate" nonattainment areas under Subpart 4, and by establishing a new SIP submission date of December 31, 2014, for Moderate area attainment plans and for any additional attainment-related or nonattainment new source review plans necessary for areas to comply with the requirements applicable under Subpart 4. *Id.* at 31567-70.

EPA is proposing to determine that the Libby Area is attaining the 1997 annual PM<sub>2.5</sub> NAAQS based on recent air quality data. EPA is also proposing to approve Montana's limited maintenance plan (LMP) for the Libby Area as meeting the requirements of section 175A of the CAA.

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<sup>1</sup> In explaining its decision, the Court reasoned that the plain meaning of the CAA requires implementation of the 1997 PM<sub>2.5</sub> NAAQS under Subpart 4 because PM<sub>2.5</sub> particles fall within the statutory definition of PM<sub>10</sub> and are thus subject to the same statutory requirements. EPA finalized its interpretation of Subpart 4 requirements as applied to the PM<sub>2.5</sub> NAAQS in its final rule entitled "Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements; Final Rule" (81 FR 58010, August 24, 2016).

EPA also proposes to determine that the Libby Area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA. This proposed rulemaking is in response to Montana's June 24, 2020 redesignation request and associated SIP submission that address the requirements described in section 107(d)(3)(E) of the CAA for the redesignation of the Libby Area from nonattainment to attainment for the 1997 annual PM<sub>2.5</sub> NAAQS.<sup>2</sup>

## **II. What is the background for EPA's proposed actions?**

### *A. The PM<sub>2.5</sub> NAAQS*

Particulate matter includes particles with diameters that are generally 2.5 microns or smaller (PM<sub>2.5</sub>) and particles with diameters that are generally 10 microns or smaller (PM<sub>10</sub>). PM<sub>2.5</sub> contributes to effects that are harmful to human health and the environment, including premature mortality, aggravation of respiratory and cardiovascular disease, decreased lung function, visibility impairment, and damage to vegetation and ecosystems. Individuals particularly sensitive to PM<sub>2.5</sub> exposure include older adults, people with heart and lung disease, and children. See 78 FR 3086 at 3088 (January 15, 2013). PM<sub>2.5</sub> can be emitted directly into the atmosphere as a solid or liquid particle ("primary PM<sub>2.5</sub>" or "direct PM<sub>2.5</sub>") or can be formed in the atmosphere ("secondary PM<sub>2.5</sub>") as a result of various chemical reactions among precursor pollutants such as nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), volatile organic compounds (VOCs), and ammonia (NH<sub>3</sub>).<sup>3</sup>

Under section 109 of the CAA, EPA has established national ambient air quality standards for certain pervasive air pollutants (referred to as "criteria pollutants") and conducts periodic reviews of the NAAQS to determine whether they should be revised or whether new NAAQS should be established. EPA sets the NAAQS for criteria pollutants at levels required to

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<sup>2</sup> See Libby Area SIP submission, available in the docket for this proposed rulemaking.

<sup>3</sup> EPA, Air Quality Criteria for Particulate Matter, No. EPA/600/P-99/002aF and EPA/600/P-99/002bF, October 2004.

protect public health and welfare.<sup>4</sup> PM<sub>2.5</sub> is one of the ambient pollutants for which EPA has established health-based standards.

On July 18, 1997 (62 FR 38652), EPA revised the NAAQS for particulate matter to add new standards for PM<sub>2.5</sub>. The Agency established primary and secondary annual and 24-hour standards for PM<sub>2.5</sub>. The annual standard was set at 15.0 micrograms per meter cubed (µg/m<sup>3</sup>) based on a 3-year average of annual mean PM<sub>2.5</sub> concentrations, and the 24-hour (daily) standard was set at 65 µg/m<sup>3</sup> based on the 3-year average of the annual 98th percentile values of 24-hour PM<sub>2.5</sub> concentrations at each population-oriented monitor within an area.<sup>5</sup>

On October 17, 2006 (71 FR 61144), EPA retained the annual average NAAQS at 15.0 µg/m<sup>3</sup> but revised the level of the 24-hour PM<sub>2.5</sub> NAAQS to 35 µg/m<sup>3</sup> based on a 3-year average of the annual 98th percentile values of 24-hour concentrations.<sup>6</sup>

On December 14, 2012, EPA promulgated the 2012 PM<sub>2.5</sub> NAAQS, including a revision of the annual standard to 12.0 µg/m<sup>3</sup> based on a 3-year average of annual mean PM<sub>2.5</sub> concentrations. The Agency maintained the 24-hour standard of 35 µg/m<sup>3</sup> based on a 3-year average of the 98th percentile of 24-hour concentrations. See 78 FR 3086 (January 15, 2013).

#### *B. Designation of PM<sub>2.5</sub> NAAQS Nonattainment Areas*

Following promulgation of a new or revised NAAQS, EPA is required by CAA section 107(d) to designate areas throughout the nation as attaining or not attaining the NAAQS. On January 5, 2005 (70 FR 944), EPA published area designations for the 1997 PM<sub>2.5</sub> NAAQS based on air quality data for the calendar years 2001-2003. In that rulemaking, EPA designated

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<sup>4</sup> For a given air pollutant, “primary” national ambient air quality standards are those determined by EPA as requisite to protect the public health. “Secondary” standards are those determined by EPA as requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air. CAA section 109(b).

<sup>5</sup> The primary and secondary standards were set at the same level for both the 24-hour and the annual PM<sub>2.5</sub> standards.

<sup>6</sup> Under EPA regulations at 40 CFR part 50, the primary and secondary 2006 24-hour PM<sub>2.5</sub> NAAQS are attained when the annual arithmetic mean concentration, as determined in accordance with 40 CFR part 50, appendix N, is less than or equal to 35 µg/m<sup>3</sup> at all relevant monitoring sites in the subject area, averaged over a 3-year period.

Libby, Montana as nonattainment for the 1997 annual PM<sub>2.5</sub> NAAQS. These designations became effective on April 5, 2005.

On March 17, 2011 (76 FR 14584), EPA approved Montana's attainment plan which included an attainment demonstration, an analysis of reasonable available control technology/reasonable available control measure (RACT/RACM), base-year and projection year inventories, and contingency measures for the 1997 PM<sub>2.5</sub> NAAQS for the Libby Area. On July 14, 2015 (80 FR 40911), EPA finalized its determination that the Libby Area attained the 1997 annual PM<sub>2.5</sub> NAAQS by the Area's statutory attainment date of December 31, 2011. This determination was based upon quality-assured and certified ambient air monitoring data for the 2007-2009 monitoring period that demonstrated that the Libby Area attained the 1997 annual PM<sub>2.5</sub> NAAQS by the attainment date. In the same rulemaking, EPA also issued a clean data determination under the Agency's Clean Data Policy<sup>7</sup> based upon quality-assured and certified ambient air monitoring data that demonstrated the Libby Area continued to attain the 1997 annual PM<sub>2.5</sub> NAAQS based on 2012-2014 monitoring data.<sup>8</sup>

On July 29, 2016, EPA issued a rule entitled "Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements" ("PM<sub>2.5</sub> SIP Requirements Rule"). See 81 FR 58010 (August 24, 2016). This rule clarifies how states should meet the statutory SIP requirements that apply to areas designated nonattainment for any PM<sub>2.5</sub> NAAQS under Subparts 1 and 4. It does so by establishing regulatory requirements and by providing guidance that is applicable to areas that are currently designated nonattainment for existing PM<sub>2.5</sub> NAAQS and areas that are designated nonattainment for any PM<sub>2.5</sub> NAAQS in the future. In addition, the rule responds to the D.C. Circuit's remand of the 1997 PM<sub>2.5</sub> Implementation Rules. As a result, the requirements of the rule also govern future actions associated with states'

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<sup>7</sup> See e.g., 70 FR 71612 (November 29, 2005) and 72 FR 20586 (April 25, 2007).

<sup>8</sup> See 71 FR 19935 (April 14, 2015) that addresses the final clean data determination and a final determination of attainment by the attainment date for the Libby nonattainment area. As part of its clean data determination submission to EPA, Montana submitted the clean data determination to address the national ambient air requirements under Subpart 4.

ongoing implementation efforts for the 1997 and 2006 PM<sub>2.5</sub> NAAQS. In the PM<sub>2.5</sub> SIP Requirements Rule, EPA revoked the 1997 primary annual PM<sub>2.5</sub> NAAQS in areas that had always been attainment for that NAAQS, and in areas that had been designated as nonattainment but that were redesignated to attainment before October 24, 2016, the PM<sub>2.5</sub> SIP Requirements Rule effective date. See 81 FR 58010 (August 24, 2016).

In the August 24, 2016 final rule, EPA also finalized a provision to revoke the 1997 primary annual PM<sub>2.5</sub> NAAQS in areas redesignated to attainment after October 24, 2016, on the effective date of an area's redesignation. See 40 CFR 50.13(d). If this proposal is finalized, the 1997 primary annual PM<sub>2.5</sub> NAAQS will be revoked for the Libby Area on the effective date of the redesignation. Beginning on that date, the Area will no longer be subject to transportation or general conformity requirements for the 1997 annual PM<sub>2.5</sub> NAAQS due to revocation of the primary NAAQS. See 81 FR 58125-6. If redesignated, the Libby Area will be required to implement the maintenance plan requirements under section 175A for the 1997 annual PM<sub>2.5</sub> NAAQS, and the prevention of significant deterioration (PSD) program for the 1997 annual PM<sub>2.5</sub> NAAQS. Once approved, the maintenance plan can only be revised if the revision meets the requirements of CAA section 110(l) and, if applicable, CAA section 193. As described in the PM<sub>2.5</sub> SIP Requirements Rule, those 1997 annual PM<sub>2.5</sub> maintenance areas with a revoked NAAQS are no longer required to submit a second 10-year maintenance plan for the 1997 annual PM<sub>2.5</sub> NAAQS. See 81 FR 58144.

### *C. PM<sub>2.5</sub> NAAQS Nonattainment Area Planning Requirements*

The CAA establishes the requirements for redesignation of an area from nonattainment to attainment. Specifically, section 107(d)(3)(E) allows for redesignation of areas from nonattainment to attainment provided that the following criteria are met:

- (1) The Administrator has determined that the area has attained the applicable NAAQS;
- (2) The Administrator has fully approved the applicable SIP for the area under section 110(k) of the CAA;



- (3) The Administrator has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions;
- (4) The Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A of the CAA; and
- (5) The state containing the area has met all requirements applicable to the area under section 110 and part D of the CAA.

Section 110 of the CAA identifies a comprehensive list of elements that SIPs must include, and part D establishes the SIP requirements for nonattainment areas. The generally applicable nonattainment SIP requirements are found in part D, subpart 1, and the particulate matter-specific SIP requirements are found in part D, subpart 4.

On April 16, 1992 (57 FR 13498), EPA provided guidance on redesignation in the General Preamble for the Implementation of Title I of the CAA Amendments of 1990, and the Agency supplemented this guidance on April 28, 1992 (57 FR 18070). EPA has provided further guidance on processing redesignation requests in the following documents:

1. “Procedures for Processing Requests to Redesignate Areas to Attainment,” Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992 (hereinafter referred to as the “Calcagni Memorandum”);
2. “State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (CAA) Deadlines,” Memorandum from John Calcagni, Director, Air Quality Management Division, October 28, 1992; and
3. “Part D New Source Review (Part D NSR) Requirements for Areas Requesting Redesignation to Attainment,” Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation, October 14, 1994 (hereinafter referred to as the “Nichols Memorandum”).

#### *D. Limited Maintenance Plans*

CAA section 175A(a) requires that nonattainment areas seeking redesignation to attainment submit “a revision of the applicable state implementation plan to provide for the maintenance of the [NAAQS] for such air pollutant in the area concerned for at least 10 years after the redesignation.” EPA explained in the Calcagni Memorandum that states may meet this requirement to “provide for the maintenance of the NAAQS” by using projected emissions inventories or air quality modeling showing continued maintenance until the end of the relevant maintenance period. See Calcagni Memorandum at 9-11. EPA clarified in three subsequent guidance memos that certain areas could meet the CAA section 175A requirement to provide for maintenance by demonstrating that the area’s design value was well below the NAAQS and that the historical stability of the area’s air quality levels showed that the area was unlikely to violate the NAAQS in the future.<sup>9</sup> The Agency refers to this streamlined demonstration of maintenance as a limited maintenance plan.

EPA has interpreted CAA section 175A as permitting this option because section 175A does not define how areas may demonstrate maintenance, and in EPA’s experience with implementing the various NAAQS, areas that qualify for an LMP and have approved LMPs, have rarely, if ever, experienced subsequent violations of the NAAQS. As noted in the LMP guidance memoranda, states seeking an LMP must still submit the other maintenance plan elements outlined in the Calcagni Memorandum, including an attainment emissions inventory, provisions for the continued operation of the ambient air quality monitoring network, verification of continued attainment, and a contingency plan in the event of a future violation of the NAAQS. Moreover, states seeking to do an LMP must still submit a CAA section 175A maintenance plan as a revision to the SIP, with all attendant notice and comment procedures. While the LMP guidance memoranda were originally written with respect to certain NAAQS,<sup>10</sup> EPA has

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<sup>9</sup> See “Limited Maintenance Plan Option for Nonclassifiable Ozone Nonattainment Areas” from Sally L. Shaver, Office of Air Quality Planning and Standards (OAQPS), dated November 16, 1994; “Limited Maintenance Plan Option for Nonclassifiable CO Nonattainment Areas” from Joseph Paisie, OAQPS, dated October 6, 1995; Copies of these guidance memoranda can be found in the docket for this proposed rulemaking.

<sup>10</sup> The prior memos addressed unclassifiable areas under the 1-hour ozone NAAQS, nonattainment areas for the PM<sub>10</sub> NAAQS, and nonattainment areas for the carbon monoxide NAAQS.

extended the LMP interpretation of section 175A to other NAAQS and pollutants not specifically covered by the previous guidance memos.<sup>11</sup>

To determine the LMP eligibility criteria for the Libby Area, EPA is interpreting the requirements as described in the 2001 memorandum from Lydia Wegman<sup>12</sup> regarding LMPs for PM<sub>10</sub> areas as applying to PM<sub>2.5</sub>. This memorandum states that one way for a PM<sub>10</sub> area to qualify for an LMP is to show that the area's average design value (ADV) (based upon the most recent 5 years of monitoring data) is at or below the critical design value (CDV). The memorandum defines the CDV as an indicator of the likelihood of future violations of the NAAQS in an area given the area's current ADV and its historical variability and provides a means for calculating the CDV for an area (or monitoring site) (Attachment A of the 2001 Wegman Memorandum). The CDV is the highest average design value an area could have before it may experience a future violation of the NAAQS with a certain probability—in the case of the Wegman Memorandum, a probability of 1 in 10. Therefore, if an area's current ADV is less than the area's CDV, that area has a less than 1 in 10 chances of violating the NAAQS in the future. As noted in Attachment A of the Wegman Memorandum, the CDV calculation was designed to apply for any NAAQS pollutant and is not specific to PM<sub>10</sub>. Montana employed this methodology to demonstrate that the Libby Area is eligible for an LMP and that the plan therefore provides for maintenance of the NAAQS for 10 years following redesignation. We agree that the State's demonstration meets the requirements of CAA section 175A and shows that the Area will continue to maintain the annual PM<sub>2.5</sub> NAAQS following redesignation through 2031. In its SIP submission, Montana used a site-specific CDV calculated with PM<sub>2.5</sub> data from the one ambient design value monitor in the Libby Area.

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<sup>11</sup> See, e.g., 79 FR 41900 (July 18, 2014) (approval of second ten-year LMP for Grant County 1971 sulfur dioxide maintenance area).

<sup>12</sup> "Limited Maintenance Plan Option for Moderate PM<sub>10</sub> Nonattainment Areas" from Lydia Wegman, OAQPS, dated August 9, 2001 (hereinafter referred to as the "Wegman Memorandum"). A copy of this guidance memorandum can be found in the docket for this proposed rulemaking.

The 2001 Wegman Memorandum also provided that an LMP was appropriate only for those PM<sub>10</sub> areas that were expecting limited growth of on-road motor vehicle emissions (including fugitive dust), and therefore included a motor vehicle regional emissions analysis demonstration that states seeking a PM<sub>10</sub> LMP should perform (Attachment B to the Wegman Memorandum). According to the Wegman Memorandum, the demonstration should show that the ADV remains below the margin of safety provided for in the memorandum, even after the growth of on-road motor vehicle emissions is considered. This proposed rulemaking uses the site-specific CDV instead of the margin of safety described in the Wegman Memorandum for this analysis as EPA has not recommended a margin of safety for the 1997 annual PM<sub>2.5</sub> NAAQS.

### **III. Why is EPA proposing these actions?**

On June 24, 2020, the State of Montana requested that EPA redesignate the Libby Area to attainment for the 1997 annual PM<sub>2.5</sub> NAAQS and submitted an associated SIP revision containing an LMP. EPA's evaluation of the plan and air quality data indicates that the Libby Area meets the requirements for redesignation set forth in section 107(d)(3)(E) of the CAA, including that the LMP fulfills the maintenance plan requirements under section 175A of the CAA. As a result of these findings, EPA is proposing to take the separate but related actions to approve the LMP and redesignate the Libby Area from nonattainment to attainment.

### **IV. What is EPA's analysis of the request?**

To redesignate an area from nonattainment to attainment, the CAA requires EPA to determine that the area has attained the applicable NAAQS (CAA section 107(d)(3)(E)(i)). The criteria for determining if an area is attaining the 1997 annual PM<sub>2.5</sub> NAAQS is set out in 40 CFR 50.13 and 40 CFR part 50, appendix N. The 1997 annual PM<sub>2.5</sub> primary and secondary

standards are met when the annual design value<sup>13</sup> at each eligible monitoring site within the area is less than or equal to 15.0 µg/m<sup>3</sup>.

Based on data from 2007-2009, EPA determined that the Libby Area attained the 1997 annual PM<sub>2.5</sub> standard by December 31, 2011, well before its attainment date of July 14, 2015.<sup>14</sup> In addition, EPA issued a final clean data determination under the Clean Data Policy that the Libby Area was attaining the 1997 annual PM<sub>2.5</sub> NAAQS, based on quality-assured and certified ambient air quality data for the 2012-2014 monitoring period. The Libby Area has continued to attain the 1997 annual PM<sub>2.5</sub> NAAQS since EPA's earlier determinations that the Area attained the NAAQS.

The Libby Area has one State and Local Air Monitoring Station (SLAMS) monitor operated by the Montana Department of Environmental Quality (MDEQ). This monitor (Air Quality System (AQS) Site ID 30-53-0018) has complete data for 2014-2021, which is the period of data utilized for this proposed redesignation.<sup>15</sup>

Table 1 summarizes the annual mean PM<sub>2.5</sub> data collected from 2014-2021 for the Libby Area.<sup>16</sup> Table 2 shows the annual design values for 2016-2021. The data presented in the tables were calculated from all data available in AQS, including those data flagged by the State of Montana as potentially influenced by exceptional events. EPA deems these data valid as they are complete and have been certified by MDEQ.

None of the annual design values from 2016-2021 from the Libby Area monitoring site exceed the 1997 annual PM<sub>2.5</sub> NAAQS of 15.0 µg/m<sup>3</sup>, and as such, EPA proposes to determine

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<sup>13</sup> The Annual PM<sub>2.5</sub> NAAQS design value is the 3-year average of PM<sub>2.5</sub> annual mean mass concentrations. These annual means are calculated as the weighted arithmetic mean of the four quarters of valid data at the site and the annual means are only considered valid when they meet data completeness requirements detailed in 40 CFR 50.13. Once three valid annual means are available, they can be averaged together to determine the annual design value for that site.

<sup>14</sup> See 80 FR 40911.

<sup>15</sup> The criteria for determining if an area is attaining the 1997 Annual PM<sub>2.5</sub> NAAQS are set out in the 40 CFR 50.13 and 40 CFR part 50, appendix N. Three years of valid annual means are required to produce a valid annual standard design value. A year meets data completeness requirements when at least 75 percent of the scheduled sampling days for each quarter have valid data.

<sup>16</sup> The annual averages in Table 1 are calculated by averaging the four quarters of data.

that the Libby Area has attained the 1997 annual PM<sub>2.5</sub> NAAQS, and therefore meets the requirement of CAA section 107(d)(3)(E)(i).

**Table 1. PM<sub>2.5</sub> One-year Annual Mean Concentrations<sup>17</sup>**

Year:	2014	2015	2016	2017	2018	2019	2020	2021
Concentration (µg/m <sup>3</sup> )	9.3	14.9	9.8	14.3	14.6	11.4	13.8	14.6

**Table 2. PM<sub>2.5</sub> Annual Design Value<sup>18</sup>**

3-Year Period:	2014-2016	2015-2017	2016-2018	2017-2019	2018-2020	2019-2021
Design Value (µg/m <sup>3</sup> )	11.4	13.0	12.9	13.4	13.3	13.3

*A. Has the State met all applicable requirements under section 110 and part D of the Clean Air Act (CAA) and have those requirements been fully approved? (CAA sections 107(d)(3)(E)(ii) and (v))*

Sections 107 (d)(3)(E)(ii) and (v) require EPA to determine that the area has a fully approved applicable SIP under section 110(k) that meets all the basic applicable requirements under section 110 and part D for purposes for redesignation. The following is a summary of how Montana meets these requirements.

#### 1. CAA Section 110 Requirements

Section 110(a)(2) of title I of the CAA delineates the general requirements for a SIP, which include enforceable emissions limitations and other control measures, means or techniques, provisions for the establishment and operation of appropriate devices necessary to collect data on ambient air quality, and programs to enforce limitations. The general SIP elements and requirements set forth in CAA section 110(a)(2) include, but are not limited to the following:

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<sup>17</sup> Annual mean concentration is the averaging of four complete quarters of data for each year. See 40 CFR part 50, appendix N.

<sup>18</sup> The Annual PM<sub>2.5</sub> NAAQS design value is the 3-year average of PM<sub>2.5</sub> annual mean mass concentrations. See 40 CFR 50.13.

- Submittal of a SIP that has been adopted by the state after reasonable public notice and hearing;
- Provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality;
- Implementation of a source permit program;
- Provisions for the implementation of part C requirements (PSD);
- Provisions for the implementation of part D requirements for NSR permit programs;
- Provisions for air pollution modeling; and
- Provisions for public and local air agency participation in planning and emission control rule development.

CAA section 110(a)(2)(D) requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state; the portion of a state's SIP that include these measures is known as an interstate transport SIP. However, these CAA section 110(a)(2)(D) requirements apply to a state and are not linked with a particular nonattainment area's designation and classification in that state. The interstate transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one area in the state. Thus, EPA has determined that these requirements are not applicable requirements for purposes of redesignation. Instead, EPA has determined that the requirements linked with a particular nonattainment area's designation and classifications are the relevant measures, i.e., the requirements that must be met, for EPA to redesignate an area.

In addition, EPA has determined that the other CAA section 110(a)(2) elements not connected with nonattainment plan submissions and not linked with an area's attainment status are not applicable requirements for purposes of redesignation because the area will still be subject to these requirements after it is redesignated. EPA concludes that the CAA section 110(a)(2) and part D requirements, which are linked with a particular area's designation and classification, are the relevant measures to evaluate in reviewing a redesignation request, and that

section 110(a)(2) elements not linked to the area's nonattainment status are not applicable for purposes of redesignation. EPA has applied this interpretation consistently in many redesignations.<sup>19</sup>

EPA's review of the Montana SIP shows that the State has satisfied the general SIP requirements under section 110(a)(2) of the CAA, to the extent they are applicable for the purposes of redesignation. Moreover, EPA has previously approved provisions of Montana's SIP as demonstrating compliance with the CAA section 110(a)(2) requirements for the 1997 annual PM<sub>2.5</sub> NAAQS. See 78 FR 45864 (July 30, 2013). Therefore, EPA proposes to determine that MDEQ has met all general SIP requirements for the Libby Area that are applicable for purposes of redesignation under section 110 of the CAA.

## 2. Part D Requirements

Subparts 1 and 4 of part D, title 1 of the CAA contain air quality planning requirements for PM<sub>2.5</sub> nonattainment areas. Subpart 1 contains general requirements for all nonattainment areas of any pollutant, including PM<sub>2.5</sub>, governed by a NAAQS. Subpart 1 requirements include, among other things, provisions for RACM, RFP, emissions inventories, contingency measures, transportation conformity and general conformity. Subpart 4 contains specific planning and scheduling requirements for PM<sub>2.5</sub> nonattainment areas. Sections 189(a), (c), (e) requirements apply specifically to Moderate PM<sub>2.5</sub> nonattainment areas and include an approved permit program for construction of new and modified major stationary sources, provisions for RACM, an attainment demonstration, quantitative milestones demonstrating RFP toward attainment by the applicable attainment date, and provisions to ensure that the control requirements applicable

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<sup>19</sup> See, e.g., 81 FR 4420 (July 17, 2006) (final redesignation for the Sullivan County, Tennessee area); 79 FR 43655 (July 28, 2014) (final redesignation for Bellefontaine, Ohio lead nonattainment area); 61 FR 53174-53176 (October 10, 1996) and 62 FR 24826 (May 7 1997) (proposed and final redesignation of Reading, Pennsylvania ozone nonattainment area); 61 FR 20458 (May 7 1996) (final redesignation for Cleveland-Akron-Lorain, Ohio ozone nonattainment area); 60 FR 62748 (December 7, 1995) (final redesignation of Tampa, Florida ozone nonattainment area); See also 65 FR 37879, 37890, (June 19, 2000) (discussing this issue in final redesignation of Cincinnati, Ohio 1-hour ozone nonattainment area); and 66 FR 50399 (October 19, 2001) (final redesignation of Pittsburgh, Pennsylvania 1-hour ozone nonattainment area).



to major stationary sources of PM<sub>2.5</sub> precursors, except where the Administrator has determined that such sources do not contribute significantly to PM<sub>2.5</sub> levels that exceed the NAAQS in the area.

We address the applicability of these requirements to this action in the following sections.

### 3. Subpart 1, Section 172 Requirements

Section 172(c) contains general requirements for nonattainment area plan provisions. A thorough discussion of these requirements may be found in the General Preamble. *See* 57 FR 13538 (April 16, 1992). EPA's longstanding interpretation is that certain planning requirements designed to get a nonattainment area to attainment of the NAAQS are not "applicable" for purposes of CAA section 107(d)(3)(E)(ii) and (v) and therefore need not be approved into the SIP before EPA can redesignate the area. In the General Preamble, EPA set forth its interpretation of applicable requirements for purposes of evaluating redesignation requests when an area is attaining the standard. *See* 57 FR 13564. EPA noted that requirements for RFP and other measures designed to provide for an area's attainment do not apply in evaluating redesignation because those nonattainment planning requirements "have no meaning" for an area that is attaining the standard. *Id.* This interpretation is also set forth in the Calcagni Memorandum.

EPA's understanding of CAA section 172 also forms its basis on its Clean Data Policy. Under the Clean Data Policy, EPA promulgates a determination of attainment, published in the *Federal Register*, which is subject to notice-and-comment rulemaking, and this determination formally suspends a state's obligation to submit most of the attainment planning requirements that would otherwise apply, including an attainment demonstration and planning SIPs to provide for RFP, RACM, and contingency measures under CAA section 179(c)(9). The Clean Data Policy has been codified in regulations regarding the implementation of the ozone and PM<sub>2.5</sub> NAAQS. *See e.g.*, 70 FR 71612 (November 29, 2005) and 72 FR 20586 (April 25, 2007).

Because the Libby Area is attaining the 1997 annual PM<sub>2.5</sub> NAAQS, the attainment planning obligations in CAA section 172, including the requirement to submit an attainment demonstration and RACM (172(c)(1)), RFP (172(c)(2)), and contingency measures (172(c)(9)) are not considered “applicable” requirements for redesignation purposes under CAA section 107(d)(3)(E)(ii) and (v). In any case, Montana submitted these elements as part of the Moderate SIP requirements on March 26, 2008, and EPA approved them on March 17, 2011.<sup>20</sup>

Section 172(c)(3) of the CAA requires a comprehensive, accurate, current inventory of actual emissions from all sources of relevant pollutant(s) in nonattainment areas. EPA’s March 17, 2011 approval of Montana’s March 26, 2008 SIP submission included a 2005 base-year emissions inventory for the Libby Area. Montana also included an emissions inventory for calendar year 2014 with the June 24, 2020 SIP submittal of the LMP for the Libby Area. The 2001 Wegman Memorandum states that an attainment inventory should represent emissions during the same 5-year period associated with the air quality data used to determine that the area meets the requirements of the LMP option. In addition, EPA reviewed an updated 2017 emissions inventory<sup>21</sup> in its analysis for the Libby PM<sub>2.5</sub> LMP.

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources in an area, and section 172(c)(5) and 189(a)(1)(A) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA approved the current Montana NSR program for PM<sub>2.5</sub> on July 18, 1995. See 60 FR 36715. Having a fully approved nonattainment NSR program is not an applicable requirement for this action; nonetheless we have approved the State’s program.<sup>22</sup>

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<sup>20</sup> See 76 FR 14584.

<sup>21</sup> Available in the docket for this proposed rulemaking.

<sup>22</sup> A detailed rationale for this view is described in the memorandum from Mary Nichols, Assistant Administrative for Air and Radiation, dated October 14, 1994, entitled, “Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment.”

Section 172(c)(7) requires the SIP meet the applicable provisions of CAA section 110(a)(2). EPA believes Montana's June 24, 2020 SIP submission pertaining to the Libby Area meets the requirements of section 110(a)(2).

#### 4. Subpart 1, Section 176 Conformity Requirements

Section 176(c) of the CAA requires states to establish the criteria and procedures to ensure that federally supported or funded projects conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to transportation plans, programs and projects that are developed, funded, or approved under title 23 of the United States Code (U.S.C.) and the Federal Transit Act (transportation conformity) as well as to other federally supported or funded projects (general conformity). State transportation conformity SIP revisions must be consistent with federal conformity regulations relating to consultation, enforcement, and enforceability that EPA promulgated pursuant to its authority under the CAA.

Although EPA interprets the conformity SIP requirements<sup>23</sup> as not applying for purposes of evaluating the redesignation request under section 107(d)(3)<sup>24</sup> we note that Montana has an approved conformity SIP. See 66 FR 48561 (September 21, 2001).

#### 5. Subpart 4 Requirements

As discussed in Section I of this document, in *NRDC V. EPA*, the D.C. Circuit held that EPA should have implemented the 1997 PM<sub>2.5</sub> annual NAAQS pursuant to the particulate matter-specific provisions of Subpart 4. On remand, EPA identified all areas designated nonattainment for either the 1997 or the 2006 PM<sub>2.5</sub> NAAQS, including the Libby Area, as Moderate nonattainment for purposes of Subpart 4 in the Classifications and Deadlines Rule. Moderate nonattainment areas are subject to the requirements of CAA sections 189(a), (c), and (e), including: (1) an approved permit program for construction of new and modified major

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<sup>23</sup> CAA section 176(c)(4)(E) requires states to submit revisions to their SIPs to reflect certain federal criteria and procedures for determining transportation conformity.

<sup>24</sup> EPA believes that this interpretation is reasonable because state conformity rules are still required after redesignation and federal conformity rules apply where states rules have not been approved. *See Wall v. EPA*, 265 F.3d 426 (6<sup>th</sup> Cir., 2001) (upholding this interpretation); 60 FR 62748 (December 7, 1995).

stationary sources (section 189(a)(1)(A)); (2) an attainment demonstration, (section 189(a)(1)(B)); (3) provisions for RACM (section 189(a)(1)(C)); (4) quantitative milestones demonstrating RFP toward attainment by the applicable attainment date (section 189(c)); and (5) precursor control (section 189(e)).

With respect to the specific attainment planning requirements under Subpart 4,<sup>25</sup> EPA applies the same interpretation that it applies to attainment planning requirements under Subpart 1 or any other pollutant-specific subparts. That is, under its long-standing interpretation of the CAA, where an area is already attaining the standard, EPA does not consider those attainment planning requirements to be applicable for purposes of evaluating a request for redesignation, that is, CAA section 107(d)(3)(E)(ii) or (v), because requirements that are designed to help an area achieve attainment no longer have meaning where an area is already meeting the standard. EPA is therefore proposing to determine that the specific attainment planning requirements under Subpart 4 are not applicable for evaluating Montana's redesignation request.

CAA section 189(e) provides that control requirements for major stationary sources of direct PM<sub>10</sub> (including PM<sub>2.5</sub>) shall also apply to particulate matter precursors from those sources, except where EPA determines that major stationary sources of such precursors do not contribute significantly to PM<sub>10</sub> levels that exceed the standard in the area. The CAA does not explicitly address whether it would be appropriate to include a potential exemption from precursor controls for all source categories under certain circumstances. In implementing Subpart 4 with regard to controlling PM<sub>10</sub>, EPA permitted states to determine that a precursor was "insignificant" where the state could show in its attainment plan that it would expeditiously attain without adoption of emission reduction measures aimed at that precursor. This approach was upheld in the *Association of Irrigated Residents v. EPA*, 423 F.3d 989 (9<sup>th</sup> Cir. 2005) and extended to PM<sub>2.5</sub> implementation in the PM<sub>2.5</sub> SIP Requirements Rule. A state may develop its

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<sup>25</sup> These planning requirements include the attainment demonstration, qualitative milestone requirements, and RACM analysis.

attainment plan and adopt RACM that target only those precursors that are necessary to control for purposes of timely attainment. *See* 81 FR 58010 at 58020 (August 24, 2016).

For the Libby Area, a precursor exemption analysis under section 189(e) and EPA's implementing regulations is not an applicable requirement that needs to be fully approved in the context of a redesignation under CAA section 107(d)(3)(E)(ii) since the Area is already in attainment which demonstrates that precursors contribution is insignificant. Therefore, measures aimed at the precursors are not needed.

As discussed previously in this document, for areas that are attaining the standard, EPA does not interpret attainment planning requirements of Subparts 1 and 4 to be applicable requirements for purposes of redesignating an area to attainment. On July 14, 2015, EPA approved that the Libby Area had attained the 1997 annual PM<sub>2.5</sub> NAAQS by the Area's statutory attainment date. The Libby Area has expeditiously attained the 1997 annual PM<sub>2.5</sub> NAAQS, and therefore, no additional controls of any pollutant, including any PM<sub>2.5</sub> precursor, are necessary to bring it into attainment. In section V of this document, we find that the Libby Area continues to attain the NAAQS. EPA has determined that the Libby Area has attained the standard due to permanent and enforceable emissions reductions. Further, as set forth in section IV.C of this document, we believe that the Libby PM<sub>2.5</sub> LMP demonstrates continued maintenance of the 1997 annual PM<sub>2.5</sub> NAAQS standard through 2031 which also demonstrates that the PM<sub>2.5</sub> precursors are insignificant. Taken together, these factors support our conclusion that PM<sub>2.5</sub> precursors are adequately controllable.

*B. Has the state demonstrated that air quality improvement is due to permanent and enforceable reductions?*

In order to approve a redesignation from nonattainment to attainment, section 107(d)(3)(E)(iii) of the CAA requires EPA to determine that the improvement in air quality is due to emission reductions that are permanent and enforceable, and that the improvement results from the implementation of the applicable SIP and applicable federal air pollution control

regulations and other permanent and enforceable regulations. Under this criterion, a state must be able to reasonably attribute the improvement in air quality to emissions reductions that are permanent and enforceable. Attainment resulting from temporary reductions in emission rates (e.g., reduced production or shutdown due to temporary adverse economic conditions) or unusually favorable meteorology would not qualify as an air quality improvement due to permanent and enforceable emission reductions. See Calcagni Memorandum at 4. In its demonstration that improvements in air quality are reasonably attributable to emissions reductions that are permanent and enforceable, Montana evaluated several factors:<sup>26</sup> the composition of PM<sub>2.5</sub> in the nonattainment area; control measures that have been implemented since the area was redesignated to nonattainment; changes to the emissions inventory over time; and meteorological and economic trends. In its evaluation, Montana identified two fugitive area sources contributing to PM<sub>2.5</sub> concentrations in the nonattainment area: wood combustion and tailpipe emissions. Eighty-two percent of the PM<sub>2.5</sub> concentrations during the baseline study year of 2005 was attributed to wood combustion. Wood combustion impacts represented both residential and small commercial space heating, and outdoor burns. The State identified emission reductions from only the wood combustion category in the attainment plan; the plan did not take credit for reductions from mobile source tailpipe emissions due to federal tailpipe standards or fleet turnover.

In its approved Moderate nonattainment plan, Montana adopted permanent and enforceable rules from the Lincoln County Air Pollution Control Program. This program includes rules that reduce PM<sub>2.5</sub> impacts in the nonattainment area resulting in attainment of PM<sub>2.5</sub> NAAQS.<sup>27</sup> The air pollution control rules in Chapter 1, Subchapters 1 through 4 of the Lincoln County Air Pollution Control Program, address solid fuel burning devices, re-entrained road dust control, and outdoor burning regulations. These rules are part of the Lincoln County

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<sup>26</sup> See Montana's attainment plan for the Libby Area, approved on March 17, 2011 (76 FR 14584).

<sup>27</sup> See Section 1.3 in the Libby Area SIP submission. Available in the docket for this proposed rulemaking.

Health Department's Health and Environmental Rules in Chapter 1. The rules contain the following subchapters, all designed to help Lincoln County attain the PM<sub>2.5</sub> NAAQS:

- Subchapter 1 – (75.1.100-106) – General Provisions;
- Subchapter 2 – (75.1.200-206,208) – Solid Fuel Burning Device Regulations;
- Subchapter 3 – (75.1.301-308) – Dust Control Regulations; and
- Subchapter 4 – (75.1.401-408) – Outdoor Burning Regulations.

The regulations in Lincoln County's Subchapter 2 require that solid fuel burning devices be permitted by the Lincoln County Environmental Health Department. The regulations restrict the material allowed for combustion and prohibit visible emissions greater than 20 percent opacity. Lincoln County will call Air Pollution Alerts<sup>28</sup> when particulate matter concentrations are more than 80 percent of the 24-hour standard and at that time, solid fuel burning devices are not allowed to operate unless the device has received an exemption. A provision allows exempt devices to be operated during an alert, but only with an opacity of 10 percent or less.

Although re-entrained road dust is not an identified emission source category, Subchapter 3 of the Lincoln County rules address re-entrained dust from roads, parking lots and commercial lots by requiring dust abatement and control. These road dust regulations apply within the regulated road sanding and sweeping district as defined in the regulation. Vehicular operations within the district are only allowed on paved surfaces within the district. To control ice on the roads, liquid de-icing agents and de-icing salts should be used. Sanding material is not allowed unless the Lincoln County Environmental Health Department declares an emergency and then only sanding material that meets specific durability, abrasion, and fine concentrations are allowed. Roads are to be maintained using a schedule of prioritized street sweeping and flushing to remove carry-on or applied materials. Commercial operations shall also implement measures to prevent depositing material on yards/lots, suppress dust, and clean adjoining roadways.

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<sup>28</sup> See 75.1.206, Lincoln County Air Pollution Control Program.

Lincoln County's Subchapter 4 addresses outdoor burning and restricts non-essential outdoor burning, promoting alternative disposal methods and recycling, and setting standards to minimize emissions when outdoor burning is necessary. These rules apply to both the air pollution control district which is the same area as the Libby nonattainment area, and the Impact Zone L, which extends beyond the nonattainment area. The rules specify which materials and activities are prohibited for outdoor burning. Residential outdoor burning is only allowed in the month of April while management burns are allowed from April through October. Burning outside these months requires additional approval from the Lincoln County Health Department. Burners must obtain a burn permit from the Department and may only conduct their burn if meteorological conditions have good air dispersion characteristics, as determined by the Department.

Montana has determined that most of the emissions reductions from the wood combustion source category are attributed to the Lincoln County residential wood combustion rules. These rules control residential and small commercial wood combustion used for space heating through a wood stove permit program. The rules restrict the installation and operation of wood stoves to times with good air quality dispersion. Lincoln County also has outdoor open burning rules that require burns to be permitted and approved to ensure the burns occur during favorable meteorological conditions.

Montana evaluated emissions from residential wood burning contributing to PM<sub>2.5</sub> in Libby, Montana. Table 2.3 in the June 24, 2020 Libby Area SIP submission displays the 2005 actual annual emissions, which are considered the annual baseline emissions for Libby. Additionally, the table shows the annual emissions from the 2014 National Emissions Inventory (NEI). As shown in the Table 2.3, emissions for residential wood burning in 2014 have decreased more than 85 percent compared to the baseline emissions in 2005. The total emissions for area source categories for 2014 total emissions have decreased more than 62 percent compared to the 2005 baseline emissions



In addition, Montana has adopted permitting requirements for major stationary sources or major modifications located in the nonattainment areas including Libby, Montana. They are located in the Administrative Rules of Montana (ARM) 17.8.901 through 17.8.906. These rules require all new sources or modifications to use the lowest achievable emission rate (LAER). Sources must obtain emission reduction offsets in tons per year (tpy) which provide a positive net air quality benefit in the nonattainment area using a one to one offset and must be from the same source or another emissions source within the same nonattainment area. There must be demonstrated improvement to the PM<sub>2.5</sub> nonattainment with permanent, quantifiable, and federally enforceable reductions. A reduction of actual emissions, not potential emissions, must occur before a new source can be permitted to operate.

In addition, Montana has a federally enforceable permitting program for minor sources in ARM, Title 17 Chapter 8, Subpart 7 that addresses PM<sub>2.5</sub> emissions. These rules require sources that emit 25 tpy or more of PM<sub>2.5</sub> to ensure the nonattainment area is not negatively affected. Beginning in May 2019, Montana began requiring registration of all sized asphalt plants, concrete plants, mineral crushers, and mineral screens. The registration program establishes conservative operational restrictions on these portable sources to prevent degradation of the air quality in nonattainment areas and elsewhere.

Not only has air quality in the Libby Area benefited from the local district and State rules discussed previously, but the Area has also benefitted from emission reductions from federal measures including federal tailpipe standards and the Federal Motor Vehicle Control Program. Federal tailpipe standards were designed to reduce vehicle emissions, including PM<sub>2.5</sub>. The previous control plan did not take credit for the PM<sub>2.5</sub> reductions resulting from lower federal vehicle emissions standards and vehicle fleet turnover in the nonattainment area. The federal tailpipe standards and vehicle turnover will continue to reduce future impacts and meet the requirements of the 1990 CAA Amendments. The Federal Motor Vehicle Control Program controls tailpipe emissions and evaporative emission standards for new vehicles. Tailpipe

impacts were less than one percent of the Libby Area during the 2005 baseline year.<sup>29</sup> The PM<sub>2.5</sub> impact reductions are supported by lower fleet vehicle fleet emissions as fleet turnover continues.

Based upon the previously listed actions by Montana in the submitted maintenance plan, EPA finds that the improvement in air quality in the Libby Area is the result of permanent and enforceable emissions reductions from a combination of EPA-approved local and State control measures and federal control measures. As such, we believe the criterion for redesignation set forth in CAA section 107(d)(3)(E)(iii) is satisfied.

*C. Does the Area have a fully approved maintenance plan pursuant to section 175A of the CAA?*

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the area has a fully approved maintenance plan pursuant to section 175A of the CAA (CAA section 107(d)(3)(E)(iv)). In conjunction with its request to redesignate the Libby Area to attainment for the 1997 annual PM<sub>2.5</sub> NAAQS, Montana submitted a SIP revision to provide for the maintenance of the 1997 annual PM<sub>2.5</sub> NAAQS for at least 10 years after the effective date of redesignation to attainment. EPA believes that this maintenance plan meets the requirements for approval under section 175A of the CAA for the reasons discussed in this section.

Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least 10 years after the Administrator approves a redesignation to attainment. Because the 1997 primary annual PM<sub>2.5</sub> NAAQS will be revoked for the Libby Area if it is redesignated to attainment, Montana is not required to submit a second 10-year maintenance plan for the 1997 primary annual PM<sub>2.5</sub> NAAQS. *See* 81 FR 58010, 58144. To address the possibility of future NAAQS violations, the maintenance plan must contain such contingency measures, as EPA deems necessary, to assure prompt correction

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<sup>29</sup> See Table 2.3 in the Libby Area SIP submission. Available in the docket for this proposed rulemaking.

of any future 1997 annual PM<sub>2.5</sub> NAAQS violations. The Calcagni Memorandum provides further guidance on the content of a maintenance plan, explaining that a maintenance plan should address five requirements: the attainment emissions inventory; maintenance demonstration; monitoring; verification of continued attainment; and a contingency plan. As is discussed here, EPA finds that Montana's maintenance plan includes all the necessary components and is thus proposing to approve it as a revision to the Montana SIP.

### 1. Attainment Emissions Inventory

As discussed previously, EPA is proposing to determine that the Libby Area is attaining the 1997 annual PM<sub>2.5</sub> NAAQS based on a monitoring data for the time period from 2014-2021. Montana selected 2014 as the attainment emission inventory year. The attainment inventory identifies the level of emissions in the Area that is sufficient to attain the 1997 annual PM<sub>2.5</sub> NAAQS. Montana began development of the attainment inventory by first generating a baseline emissions inventory for the Libby Area. Montana selected 2005 as the base year for developing a comprehensive emissions inventory for direct PM<sub>2.5</sub> and the PM<sub>2.5</sub> precursors SO<sub>2</sub>, NO<sub>x</sub>, VOCs, and ammonia. See 76 FR 14584 (March 17, 2011). The Wegman Memorandum states that an attainment inventory should represent emissions during the same 5-year period associated with the air quality data used to determine that the area meets the applicability requirements of the LMP option. The Libby LMP, provided in Montana's June 24, 2020 SIP submission, includes an emission inventory from 2014, representative of the 2014-2021 time period which served as the 5-year period relied upon in limited maintenance plans as meeting the air quality data requirements of the Wegman Memorandum<sup>30</sup>

### 2. Maintenance Demonstration

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<sup>30</sup> The emissions inventory included in the Libby Area SIP submission is the 2014 NEI. The NEI is a composite of data from many different sources, with PM data coming primarily from EPA models as well as from state, tribal, and local air quality management agencies. Different data sources use different data collection methods, and many of the emissions data are based on estimates rather than actual measurements. EPA considers the 2014 NEI representative of the period from 2014-2021 because Montana provided comparable vehicle miles traveled (VMT) data in their submission. See Libby Area SIP submission, Appendix A, Montana Department of Transportation Future VMT Projections, p. A-1 in docket for this proposed rulemaking.

Montana’s SIP submission for the Libby Area employs the CDV method laid out in the 2001 Wegman Memorandum to demonstrate that the Area is eligible for an LMP. As noted previously, the CDV calculation from the Wegman Memorandum represents the highest design value an area could have before it would violate the NAAQS given a 1 in 10 probability—that is, if the area’s current ADV (based on the most recent five years of data) is less than the CDV, there is a less than 1 in 10 probabilities that the area will violate in the future. The State’s submission calculates the ADV as 10.9  $\mu\text{g}/\text{m}^3$  and calculates the site-specific CDV as 14.1  $\mu\text{g}/\text{m}^3$  using the Libby Area monitor data from 2014-2018. Therefore, the State’s submission showed the Libby ADV is less than the CDV, but because of the time that has elapsed since the State’s submission, EPA has also analyzed more recent data that are available in AQS and have been certified by the MDEQ.

To calculate the ADV we averaged the most recent five design values for the  $\text{PM}_{2.5}$  annual standard. Since each design value is calculated by averaging three years of valid annual means, the average of the last five design values includes data from the most recent 7-year period (2014-2021). Table 3 presents the most recent annual  $\text{PM}_{2.5}$  NAAQS design values for 2017-2021 and presents the resulting ADV of 13.2  $\mu\text{g}/\text{m}^3$ .

To calculate the CDV we use the most recent five years of design values and their variability with the equation presented in the Wegman Memorandum (Table 3). The resulting site-specific CDV is calculated to be 14.6  $\mu\text{g}/\text{m}^3$  (Table 5). Therefore, the ADV (13.2  $\mu\text{g}/\text{m}^3$ ) falls below the site-specific CDV of 14.6  $\mu\text{g}/\text{m}^3$  and thus meets the first criterion for LMP eligibility.<sup>31</sup>

**Table 3. Annual  $\text{PM}_{2.5}$  NAAQS Design Values ( $\mu\text{g}/\text{m}^3$ )<sup>32</sup>**

2017 Design Value (2015–2017)*	2018 Design Value (2016–2018)*	2019 Design Value (2017–2019)*	2020 Design Value (2018–2020)*	2021 Design Value (2019–2021)*	Average of Most Recent 3-Year Design Values (ADV)
13.0	12.9	13.4	13.3	13.3	13.2

<sup>31</sup> See Libby  $\text{PM}_{2.5}$  CDV Calculations in docket for this proposed rulemaking.

<sup>32</sup> In Table 3, (years)\* is referring to what data was included in the calculation for each 3-year design value.

**Table 4. Eligibility Calculation Equations**

<b>Critical Design Value</b>	$CDV = NAAQS / (1 + (t_c \times CV))$
<b>Coefficient of Variation</b>	$CV = \sigma / ADV$
<b>Projected DV due to Motor Vehicle Growth over 10 years</b>	$Projected\ DV = ADV + (VMT_{pi} \times DV_{mv})$

ADV = Average of 3-year design values

DV = Design value

$DV_{mv}$  = motor vehicle design value based on on-road mobile portion of the attainment year inventory

NAAQS = Applicable standard ( $15\ \mu\text{g}/\text{m}^3$ )

$\sigma$  = standard deviation of design values

$t_c$  = Critical t-value (based on the one-tail student's t-distribution, at a significance level of 0.10)

$VMT_{pi}$  = Projected percent increase in vehicle miles traveled (VMT) over the next 10 years

**Table 5. Calculation of the CDV Using 2017-2021 Design Values**

NAAQS	$15.0\ \mu\text{g}/\text{m}^3$
$T_c$	1.533
ADV (2017-2021)	$13.2\ \mu\text{g}/\text{m}^3$
$\Sigma$	$0.2168\ \mu\text{g}/\text{m}^3$
CV	0.0164
$CDV = [NAAQS / (1 + t_c \times CV)]$	$14.6\ \mu\text{g}/\text{m}^3$

In addition to having an ADV that is at or below the site-specific CDV, the 2001 Wegman Memorandum also provides a methodology for calculating a margin of safety factor based on expected growth in mobile source emissions. The memo lays out in Attachment B a motor vehicle regional emissions analysis test, which is designed to account for an area's expected change in vehicle miles traveled, to determine whether increased emissions from on-road mobile sources could, in the next 10 years, increase concentrations in the area and threaten the assumption of maintenance that underlies LMP policy. In its June 24, 2020 SIP submission, Montana employed the motor vehicle regional emissions analysis test outlined in Attachment B of the Wegman Memorandum to demonstrate that the Libby Area's expected growth in mobile source emissions would not threaten maintenance of the NAAQS. Using data from 2014-2018 the State calculated that due to growth in mobile source emissions the ADV may increase from  $10.9\ \mu\text{g}/\text{m}^3$  to  $11.1\ \mu\text{g}/\text{m}^3$  in the next 10 years, but that  $11.1\ \mu\text{g}/\text{m}^3$  is still below the margin of safety as defined by the site-specific CDV ( $14.1\ \mu\text{g}/\text{m}^3$ ). EPA has also examined more recent

data to confirm that even with updated information, the test continues to show that anticipated growth in mobile source emissions should not interfere with the Libby Area's maintenance of the 1997 annual PM<sub>2.5</sub> NAAQS. Using design values from 2017-2021, we calculated that due to expected growth in mobile source emissions, the ADV may increase from 13.2 µg/m<sup>3</sup> to 13.5 µg/m<sup>3</sup> in the next 10 years, but that 13.5 µg/m<sup>3</sup> is still below the margin of safety as defined by the site-specific CDV (14.6 µg/m<sup>3</sup>). For the calculations used to determine how the Libby Area passed the motor vehicle regional analysis test, see Table 6.<sup>33</sup>

**Table 6. Motor vehicle regional emissions analysis test calculations**

ADV (2017-2021)	13.2 µg/m <sup>3</sup>
VMT <sub>pi</sub>	11.56 %
DV <sub>mv</sub>	2.5 µg/m <sup>3</sup>
<b>Calculated [ADV + (VMT<sub>pi</sub>×DV<sub>mv</sub>)]</b>	<b>13.5 µg/m<sup>3</sup></b>

The 2001 Wegman Memorandum also indicates that once a state has an approved LMP, the state will be expected to determine, on an annual basis, that the LMP criteria are still being met. If the state determines that the LMP criteria are not being met, it should take action to reduce PM<sub>2.5</sub> concentrations enough to requalify for the LMP. One possible approach a state could take is to implement contingency measures. For a description of contingency provisions included in the Libby LMP, see section 3.6 of Montana's June 24, 2020 SIP submission.

Although the State flagged some PM<sub>2.5</sub> values as potentially affected by exceptional events, such as wildfire smoke, this action utilizes all quality-assured monitoring data from Libby. A 2019 memo from Richard Wayland and Anna Wood regarding additional methods, determinations, and analyses to modify air quality data beyond exceptional events,<sup>34</sup> indicates that monitoring data could qualify for exclusion for use in calculating air quality design values in support of a NAAQS LMP submission and any subsequent yearly design value calculations for

<sup>33</sup> See Memo to File, Libby MT Motor Vehicle Regional Emission Analysis in docket for this proposed rulemaking.

<sup>34</sup> See the memorandum from Richard Wayland, Director of Air Quality Assessment Division and Anna Marie Wood, Director of Air Quality Policy Division, dated April 4, 2019, entitled, "Additional Methods, Determinations, and Analyses to Modify Air Quality Data Beyond Exceptional Events."

areas with approved LMPs. The memorandum states that such data exclusion requests will be treated in a manner analogous to the treatment of exceedance data under the Exceptional Events Rule (EER). Since the Libby Area qualifies for the LMP option without the removal of any demonstrated values, the flagged data have no regulatory significance and therefore the demonstrated values are included in the calculations and remain in AQS. Additional information on the EER can be found in 40 CFR 50.14 and 40 CFR 51.930.

Pursuant to the Wegman Memorandum, the State's approved maintenance plan should include an emissions inventory (attainment inventory) which can be used to demonstrate attainment of the NAAQS. The inventory should represent emissions during the same 5-year period associated with air quality data used to determine whether the area meets the applicability requirements of the LMP option. The state should review its inventory every three years to ensure emissions growth is incorporated in the attainment inventory, if necessary. In this instance, Montana completed an attainment year inventory for 2014 for the Libby Area. EPA has reviewed the 2014 emissions inventories and determined that they are appropriate for this plan.

### 3. Monitoring Network

The PM<sub>2.5</sub> monitoring network for the Libby Area has been developed and maintained in accordance with federal siting and design criteria in 40 CFR part 58, appendices D and E and in consultation with EPA Region 8. In section 3.5 of the Libby LMP, located within Montana's June 24, 2020 SIP submission, Montana states that it will continue to operate its monitoring network to meet EPA requirements at 40 CFR part 58 and identify any issues or adjustments via the annual Ambient Air Monitoring Network Plan or formal communication. EPA approved Montana's 2021 monitoring plan on November 16, 2021.<sup>35</sup>

### 4. Verification of Continued Attainment

Montana, through MDEQ, has the legal authority to enforce and implement the requirements of the Libby LMP. This includes the authority to adopt, implement, and enforce

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<sup>35</sup> See MT AMNP Approval Letter 2021 in docket for the proposed rulemaking.

any subsequent emissions control contingency measures determined to be necessary to correct future PM<sub>2.5</sub> attainment problems.

In demonstrating maintenance, continued attainment of the NAAQS can be verified through operation of an appropriate air quality monitoring network. The Calcagni Memorandum (p.11) states that the maintenance plan should contain provisions for continued operation of air quality monitors that will provide such verification. As discussed in section V of this document, PM<sub>2.5</sub> is currently monitored by MDEQ within the Libby Area. In section 3.5 of Montana's submitted maintenance plan, MDEQ intends to maintain an appropriate PM<sub>2.5</sub> monitoring network and review monitoring and emissions data through the maintenance period.

MDEQ will track the progress of the maintenance plan by performing future reviews of triennial emission inventories for the Libby Area as required in the Air Emissions Reporting Rule (AERR). Emissions information will be compared to the attainment year to assure continued compliance with the annual PM<sub>2.5</sub> standard.

## 5. Contingency Provisions

Section 175A(d) of the CAA requires that the maintenance plan contains contingency provisions to assure that the state will promptly correct any violation of the relevant PM<sub>2.5</sub> NAAQS that may occur after the redesignation of the area to attainment. Such provisions must include a requirement that the state will implement all measures with respect to the control of the air pollutant concerned that were contained in the SIP for the area before redesignation of the area as an attainment area. EPA's redesignation guidance notes that the state is not required to have fully adopted contingency measures that will take effect without further action by the state. As such, the contingency plan should ensure that the state has the capacity to adopt the contingency measures expediently if the need were triggered. Therefore, the primary elements of this contingency plan involve the tracking and triggering mechanisms to determine when contingency measures would be necessary and a process for implementing appropriate control measures.



Montana will continue to monitor and analyze PM<sub>2.5</sub> concentrations to determine continued maintenance of the relevant PM<sub>2.5</sub> NAAQS. In accordance with 40 CFR part 58, MDEQ will continue to operate the Libby monitor (Site ID 30-053-0018).

If the State determines the Libby Area has exceeded the 1997 annual PM<sub>2.5</sub> NAAQS, the triggering of the contingency plan does not automatically require a revision of the SIP, nor is the Area necessarily redesignated once again to nonattainment. Instead, MDEQ will have an appropriate timeframe to correct the violation with implementation of one or more adopted contingency measures. If violations continue to occur, additional contingency measures may need to be adopted until the violations are corrected.

Montana has adopted a contingency provision to address future PM<sub>2.5</sub> air quality problems. The contingency provisions in the Libby PM<sub>2.5</sub> LMP are contained in section 3.6. of Montana's June 24, 2020, SIP submission. MDEQ identifies the following steps if a violation occurs, and the State triggers the contingency plan:

1. Within 12 months of an exceedance notification, MDEQ and the local government in the Libby Area will commence an analysis to review information about historical exceedances of the standard, the meteorological conditions related to recent exceedance(s), most recent growth, and emissions, and if the possibility of an exceptional event occurred. MDEQ will develop appropriate contingency measure(s) to correct the violation of the PM<sub>2.5</sub> standard.
2. Under the 2016 revisions to the Treatment of Data Influenced by Exceptional Events Rule (81 FR 68216), MDEQ will confer with EPA Region 8 regarding whether any flagged exceptional events would meet the criteria of a regulatory decision, and if so, a determination would be made on whether to move forward with producing a demonstration and if that would trigger contingency measures.
3. If MDEQ and the local government in the Libby Area finds locally adopted control measures to be inadequate, MDEQ and the local government will adopt state-

enforceable measures as deemed necessary by MDEQ to prevent additional exceedances or violations. Measures to be considered include implementation of Libby's Contingency Rules 75.1.208 and 75.1.307, as spelled out in Montana's Libby PM<sub>2.5</sub> attainment plan, the use of deciphers, additional street cleaning, etc.

Upon our review, we find that the contingency provisions of the Libby PM<sub>2.5</sub> LMP satisfy the pertinent requirements of section 175A of the CAA.

#### *D. Transportation and General Conformity*

The requirements for transportation and general conformity are found in CAA section 176(c). Conformity to the SIP means that transportation-related actions (transportation conformity) and other federal actions (general conformity) will not cause or contribute to any new violation of any standard in any area, increase the frequency or severity of any existing violation of any standard in any area or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area (CAA section 176(c)(1)(B)).

As discussed in section II.B, if the proposal is finalized, the 1997 primary annual PM<sub>2.5</sub> NAAQS will be revoked in the Libby Area on the effective date of the redesignation. Beginning on that date, the Area will no longer be subject to transportation conformity or general conformity requirements for the 1997 annual PM<sub>2.5</sub> NAAQS due to the revocation of the 1997 primary annual PM<sub>2.5</sub> NAAQS. See 81 FR 58125-6.

#### **V. What are the effects of EPA's proposed actions?**

EPA's proposed actions establish the basis upon which EPA may take final action on the issues being proposed for approval. Approval of Montana's redesignation request would change the legal designation of Lincoln County for the 1997 annual PM<sub>2.5</sub> NAAQS, found at 40 CFR part 81, from nonattainment to attainment. The limited maintenance plan includes contingency measures to remedy any future violations of the 1997 annual PM<sub>2.5</sub> NAAQS and procedures for evaluation of potential violations.

#### **VI. Proposed Actions**

EPA is proposing to: (1) determine that the Libby Area is attaining the 1997 annual PM<sub>2.5</sub> NAAQS based on 2014–2021 data; (2) approve Montana’s plan for maintaining the 1997 annual PM<sub>2.5</sub> NAAQS (limited maintenance plan); and (3) redesignate the Libby Area to attainment for the 1997 annual PM<sub>2.5</sub> NAAQS. If finalized, approval of the redesignation request would change the official designation of Lincoln County for the 1997 annual PM<sub>2.5</sub> NAAQS, found at 40 CFR part 81 from nonattainment to attainment, as found at 40 CFR part 81.

## **VII. Statutory and Executive Order Reviews**

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those imposed by state law. A redesignation to attainment does not in and of itself create any new requirements, but rather results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA’s role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely proposes to approve state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For these reasons, this proposed action:

- Is not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);

- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Executive Order 12898 (59 FR 7629, February 16, 1994, directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate disproportionately high and adverse human health or environmental effects of their program, policies, and activities on minority populations (people of color/Indigenous people) and low-income populations.

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the proposed rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

## **List of Subjects**

### *40 CFR Part 52*

Environmental protection, Air pollution control, Carbon monoxide, Greenhouse gases, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone,

Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

*40 CFR Part 81*

Environmental protection, Air pollution control, National parks, and Wilderness areas.

**Authority:** 42 U.S.C. 7401 *et seq.*

Dated: \_\_December 1, 2022.

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KC Becker,  
Regional Administrator,  
Region 8.

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